WHAT IS CLAIMED:

1. A short arc lamp comprising:

a ceramic body having a first end in which a concave reflector surface is formed, said reflector surface having an axis of rotation and a focal region defined along said axis of rotation, said ceramic body having an opposing second end, said ceramic body being formed from beryllium oxide;

a base including a main body portion having a first end and a second end, said first end having a recess therein adapted to concentrically receive a second end of said ceramic body, said second end having surface area enhancements formed therein;

a window frame structure positioned in abutting concentric relation with said first end of said ceramic body, said window frame structure including an annular flange having a substantially U-shaped cross-section and further including at least one cathode support arm extending radially inwardly therefrom, said cathode support arm supporting a cathode mount at the terminal end thereof and being positioned on said axis of rotation;

a window frame ring extending in overlapping relation across the abutting ends of said window frame and said first end of said ceramic body;

a disk-shaped window seated within said window frame;

an anode mounted in said base and including a tip portion that extends through said ceramic body, said tip portion extending in axial alignment with said axis of rotation of said reflector surface and being positioned within said focal region;

a cathode secured within said cathode mount and extending axially along said axis of rotation, said cathode having a tip portion in axially spaced relation to said tip portion of said anode; and

means for redirecting substantially all of the infra-red light energy generated by said lamp, said means including a dichroic coating on said reflector surface, said dichroic coating reflecting visible light outwardly toward said window, said coating further allowing infra-red energy to pass through said coating and a filter coating on said window preventing infra-red light energy from exiting said lamp through said window, said infra-red energy being transmitted as heat through said reflector surface and said body, into said base, said infra-red energy being dissipated through said surface area enhancements.